

AcceleratorApplianceDrive-KIIV2.0system

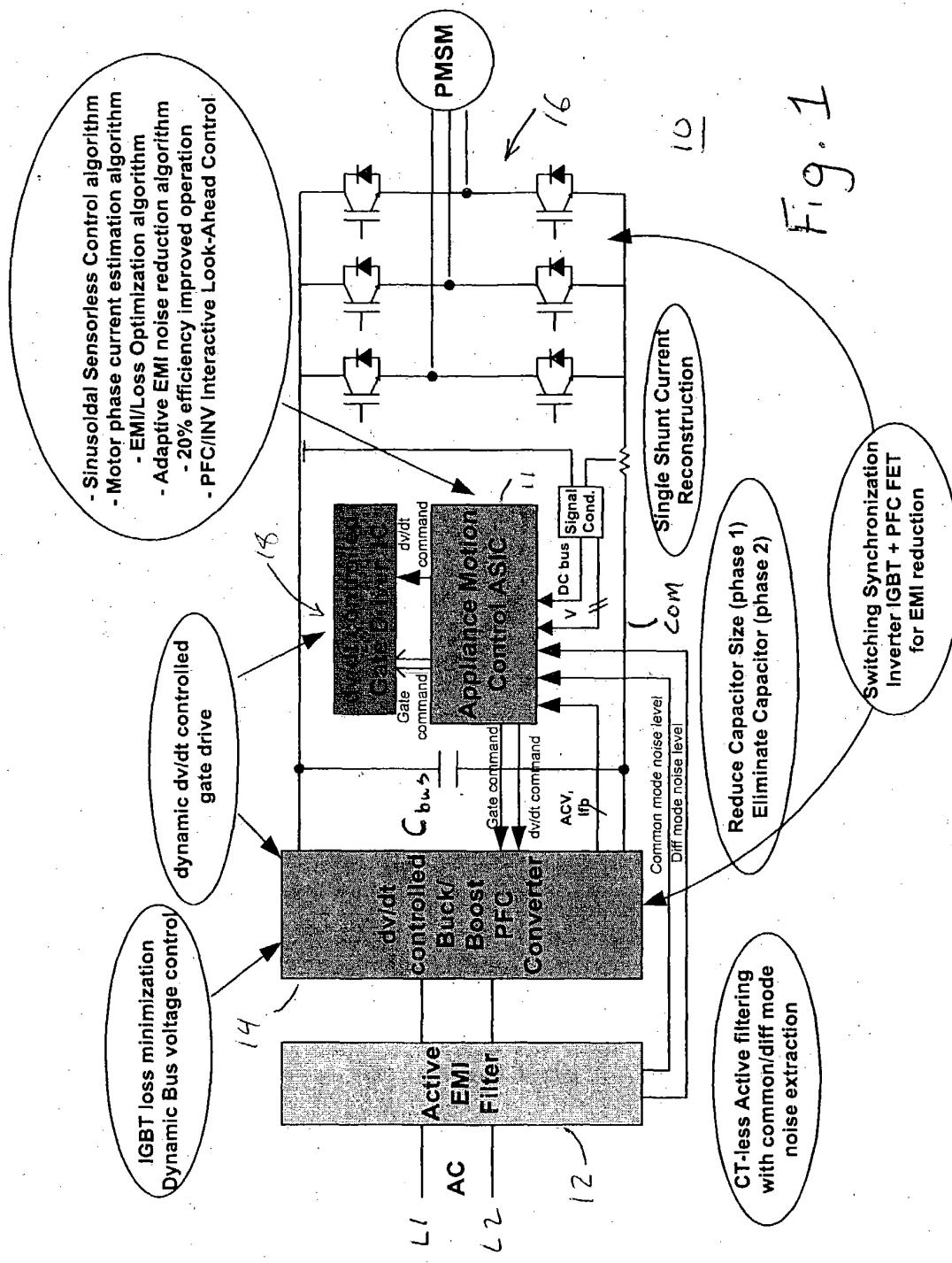
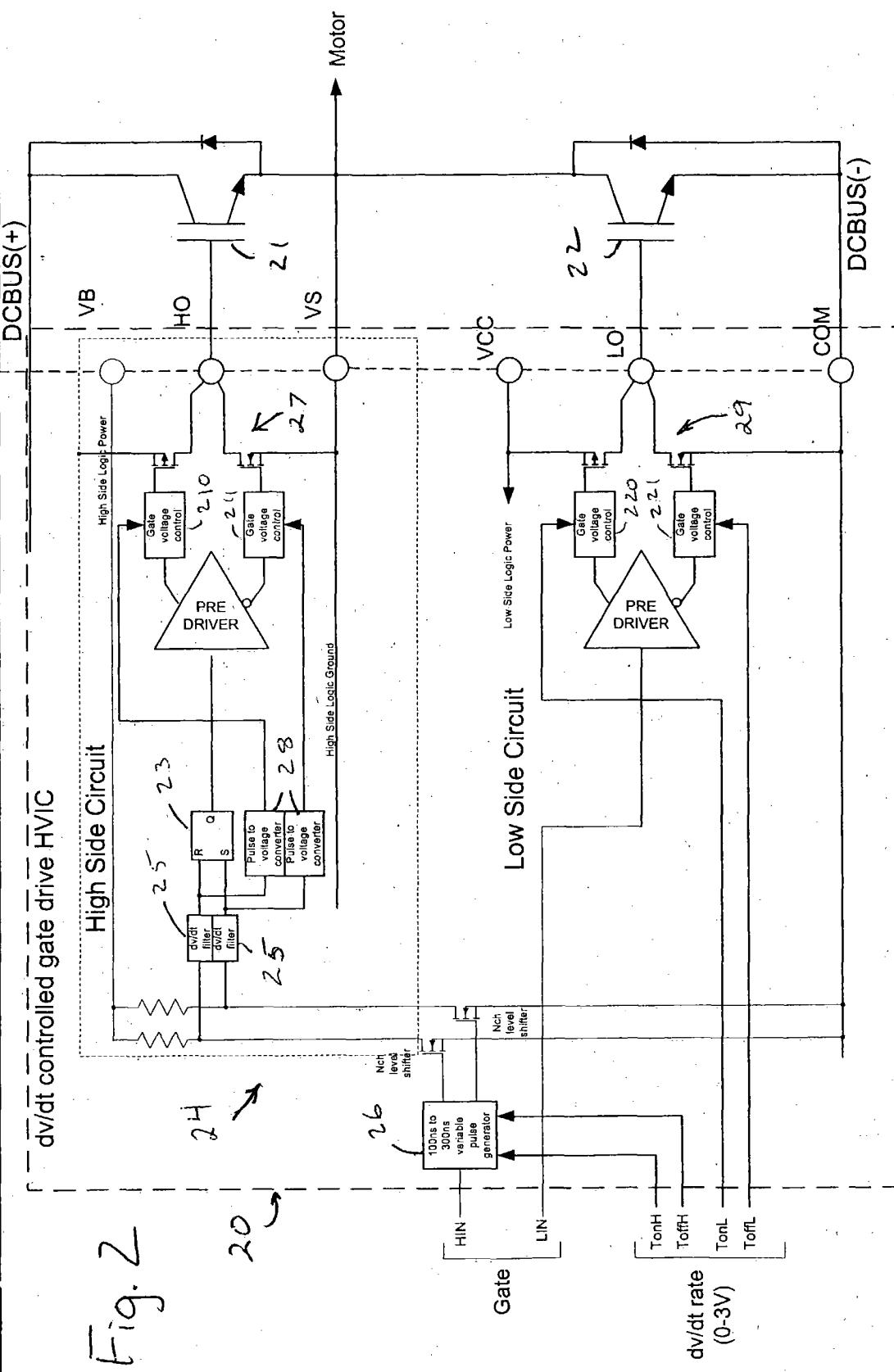


Fig. 1

Global/Closed/loop EM/Control- dv/dt controlled HVIC

TCR

Fig. 2



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Global/ClosedloopEMIcontrol—ControlMethod

IR

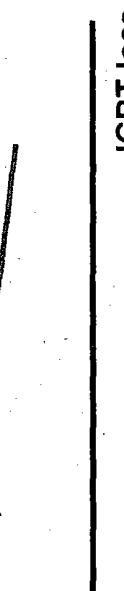
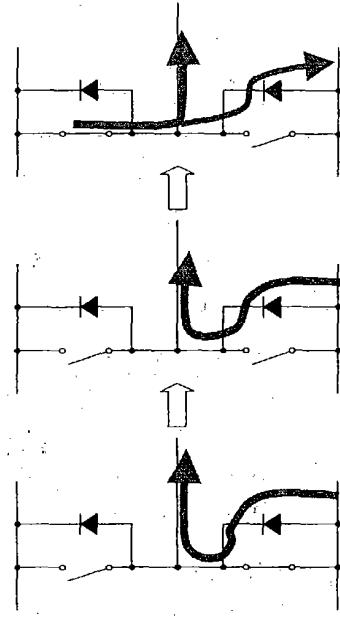
EMI noise
 (dv/dt)

Trajectory

Lower DC bus

Fig. 3

Source of Differential mode noise



Adaptive Control

Control walks through the loss/EMI minimization trajectory

For differential mode noise reduction:

Slow dv/dt for only T_{on}

For common mode noise reduction:

Slow dv/dt for T_{on} and T_{off}

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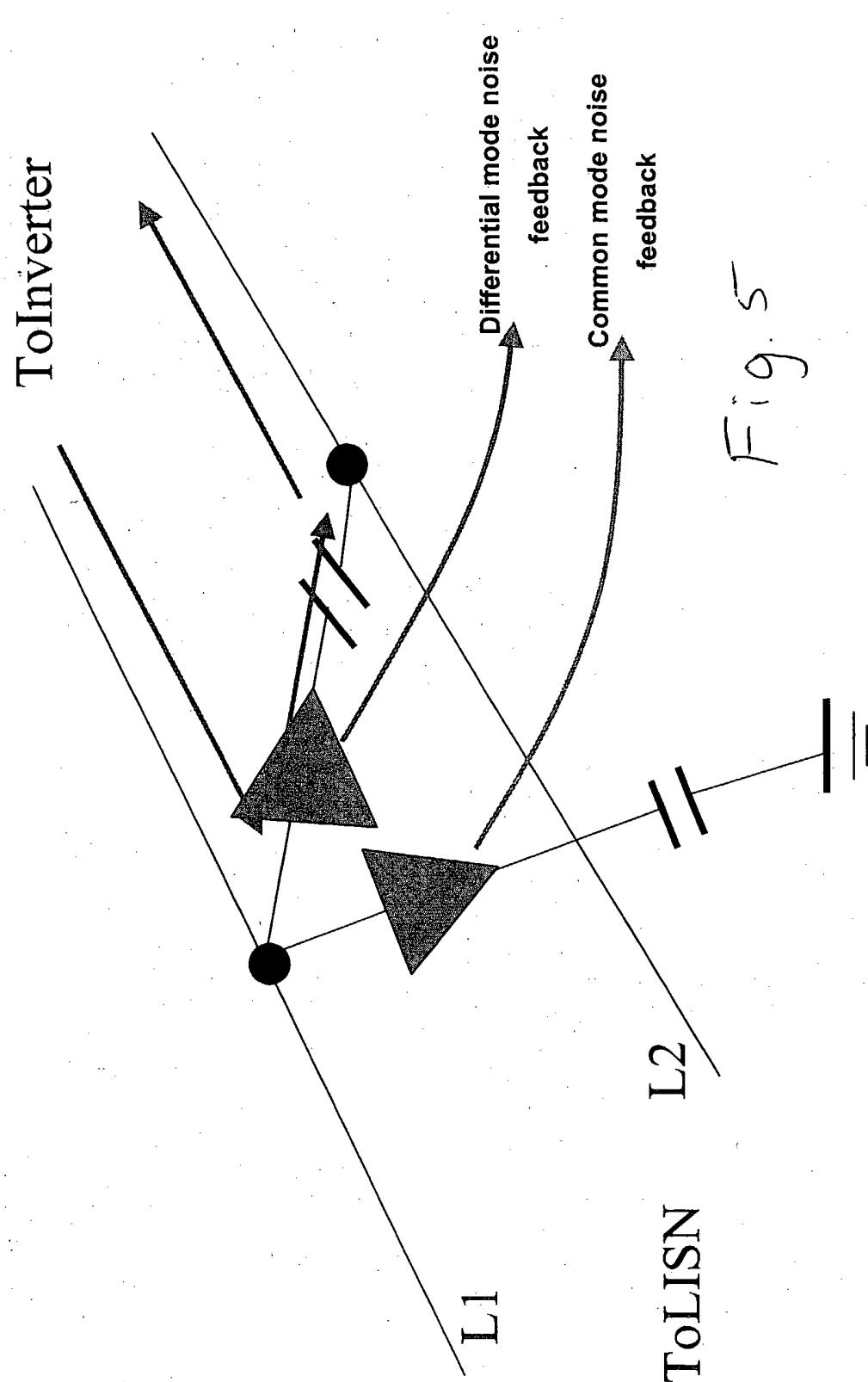
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3

Global Closed-loop EMI control: CT-Less Active Filter

IR

ToInverter



Global/ClosedloopEMI/Control: Fastnoisesampling

TER

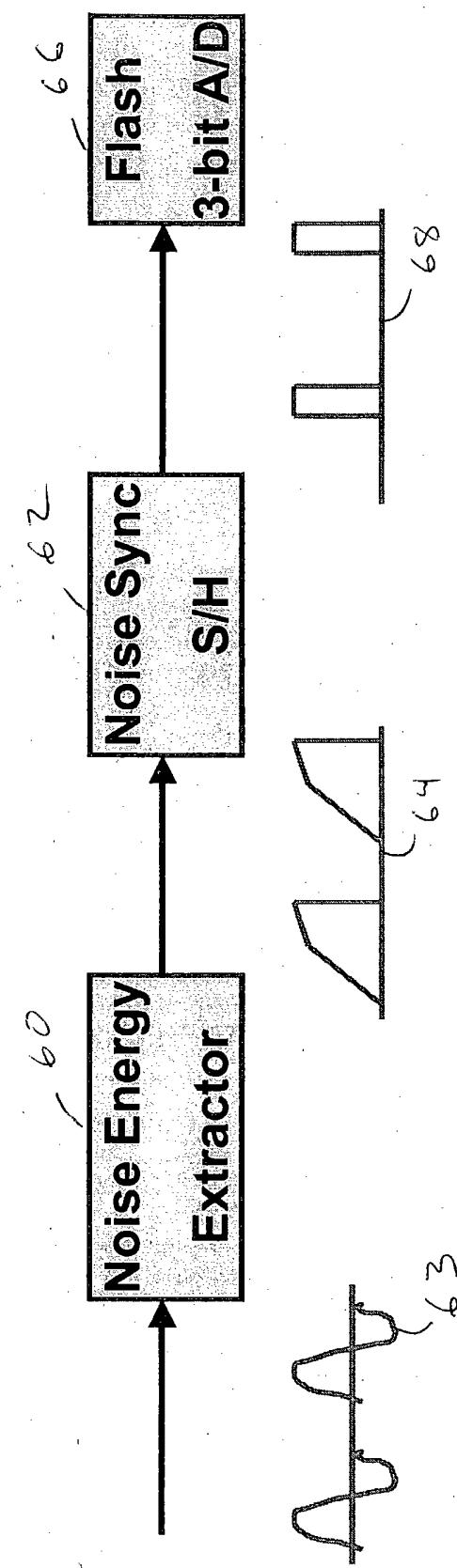


Fig. 6

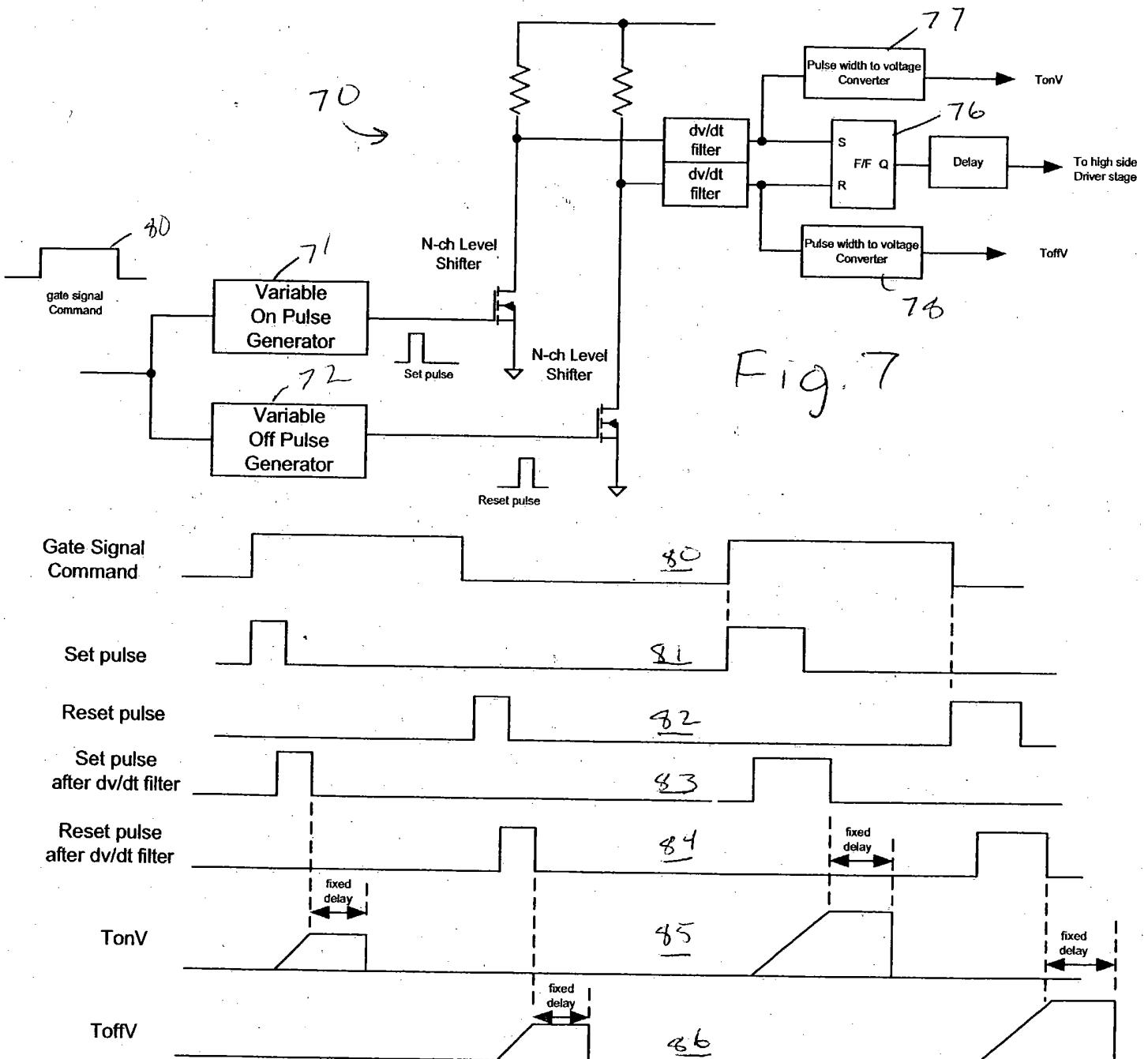
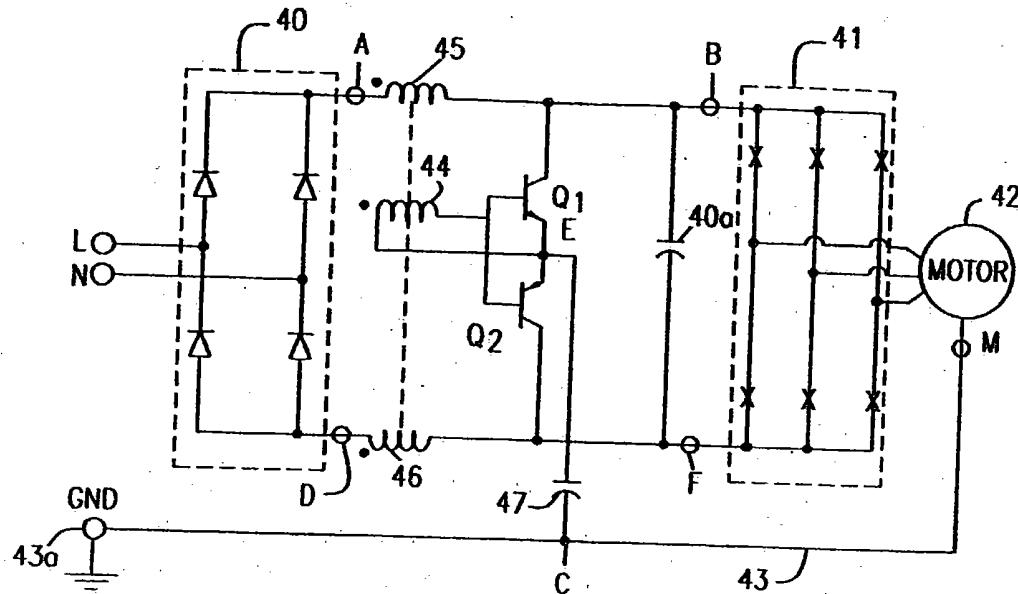
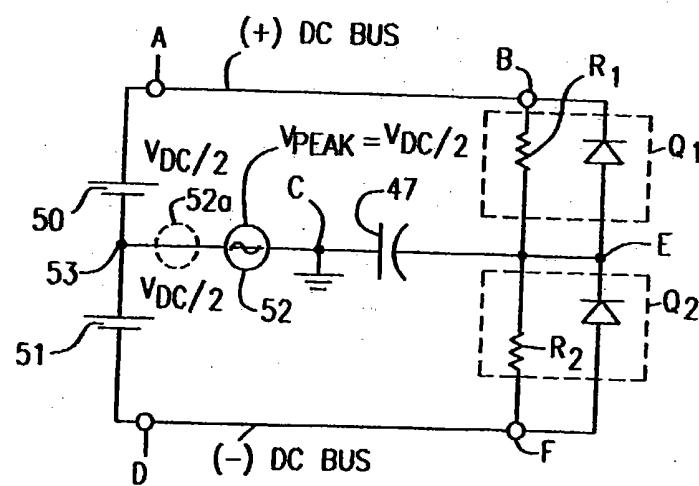


Figure 2 Basic Timing Diagram of high side drive

Fig. 8



(PROIR ART)
FIG. 9



(PROIR ART)
FIG. 10